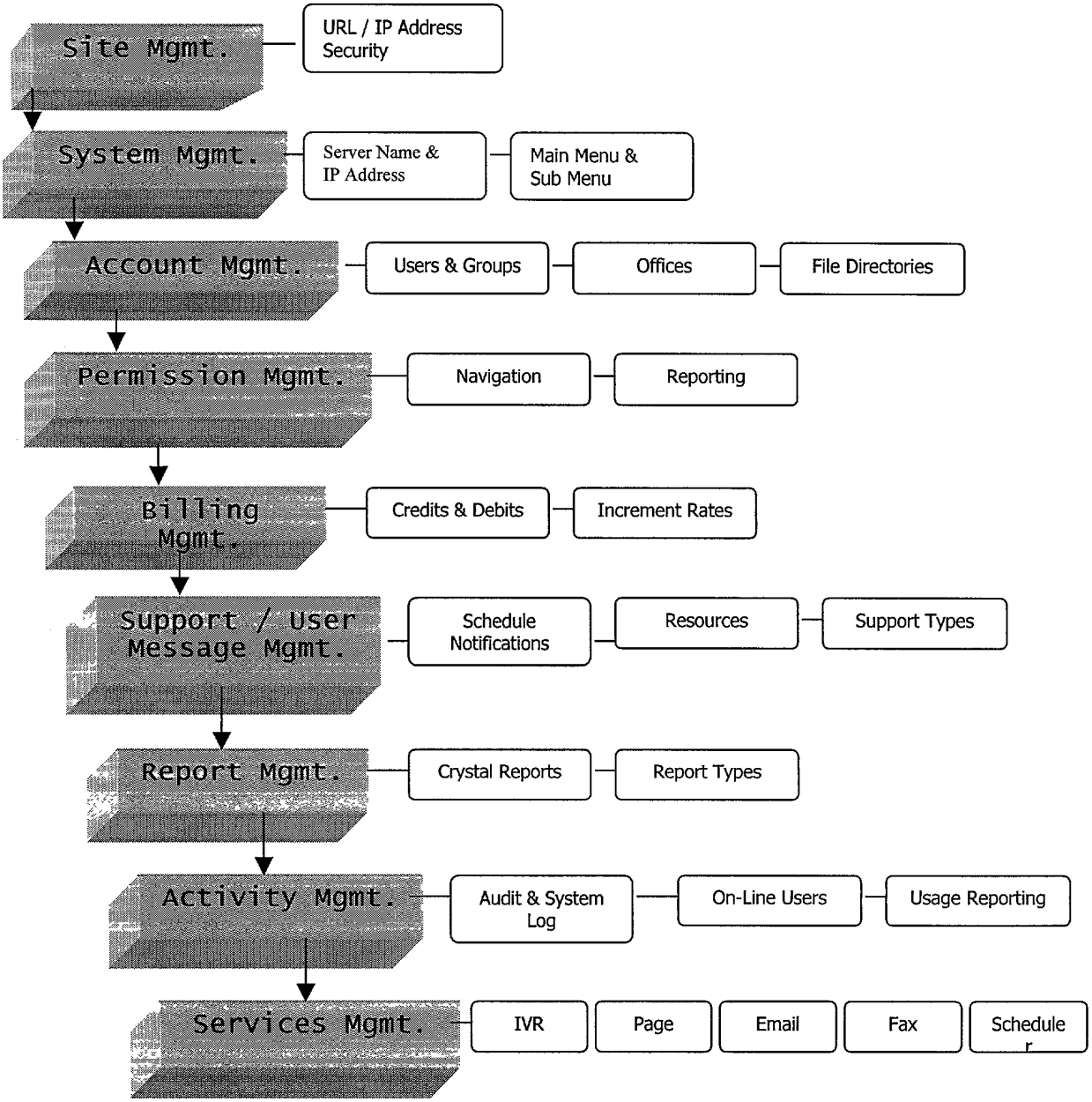
Site Mgmt.
URL / IP Address Security
System Mgmt.
Server Name & IP Address
Main Menu & Sub Menu
Account Mgmt.
Users & Groups
Offices
File Directories
Permission Mgmt.
Navigation
Reporting
Billing Mgmt.
Credits & Debits
Increment Rates
Support / User Message Mgmt.
Schedule Notifications
Resources
Support Types
Report Mgmt.
Crystal Reports
Report Types
Activity Mgmt.
Audit & System Log
On-Line Users
Usage Reporting
Services Mgmt.
IVR
Page
Email
Fax
Schedule r

Figure 1

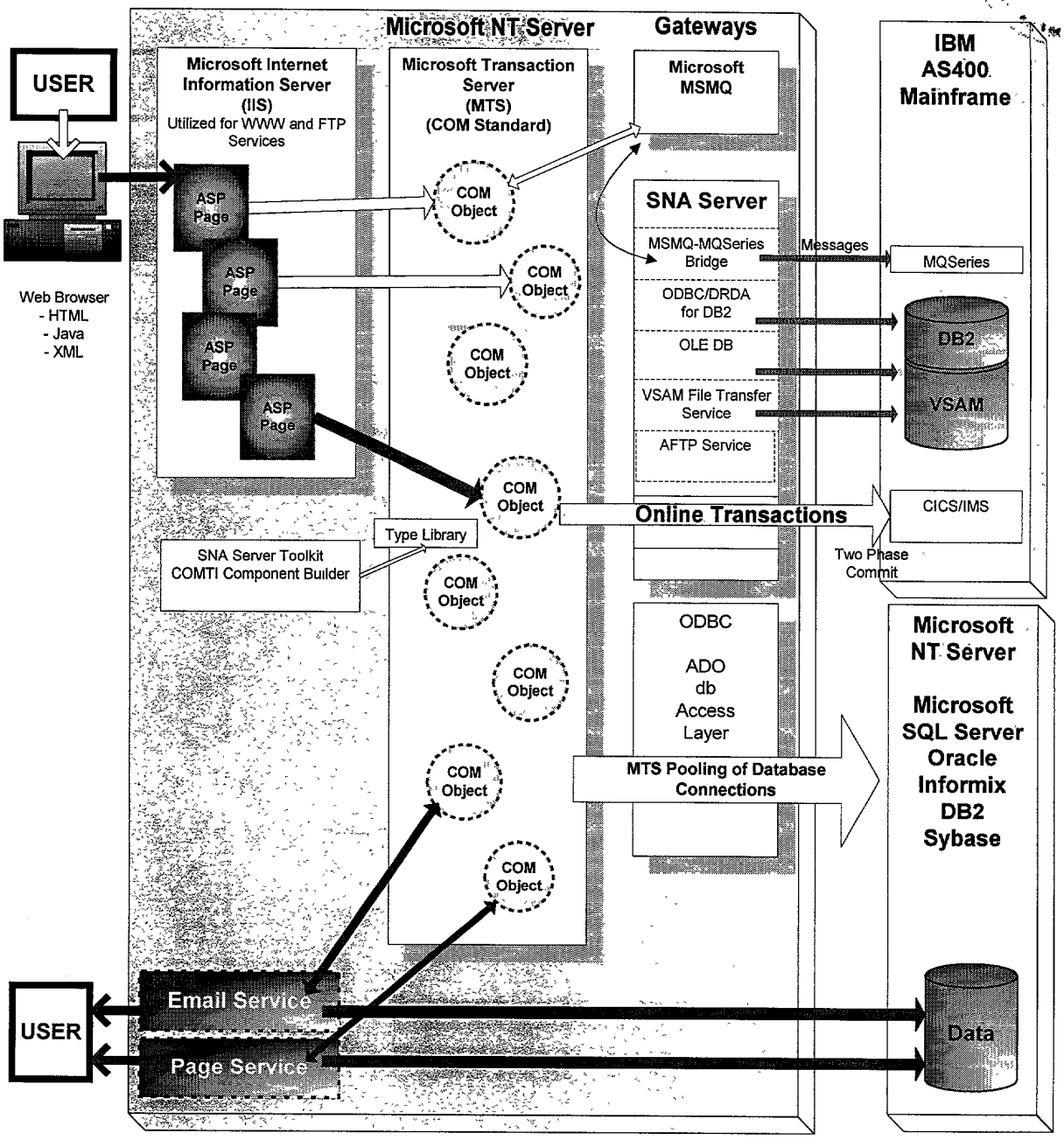
Microsoft NT Server
Gateways
USER
Microsoft Internet Information Server (IIS)
Utilized for WWW and FTP Services
Microsoft Transaction Server (MTS)
(COM Standard)
Microsoft MSMQ
IBM AS400 Mainframe
ASP Page
ASP Page
ASP Page
ASP Page
COM Object
COM Object
COM Object
SNA Server
MSMQ-MQSeries Bridge
Messages
MQSeries
ODBC/DRDA for DB2
OLE DB
VSAM File Transfer Service
AFTP Service
DB2
VSAM
Web Browser
- HTML
- Java
- XML
COM Object
Online Transactions
CICS/IMS
Two Phase Commit
Type Library
SNA Server Toolkit
COMTI Component Builder
COM Object
COM Object
ODBC
ADO
db
Access
Layer
Microsoft NT Server
Microsoft SQL Server
Oracle
Informix
DB2
Sybase
COM Object
MTS Pooling of Database Connections
COM Object
USER
Email Service
Page Service
Data

Figure 2

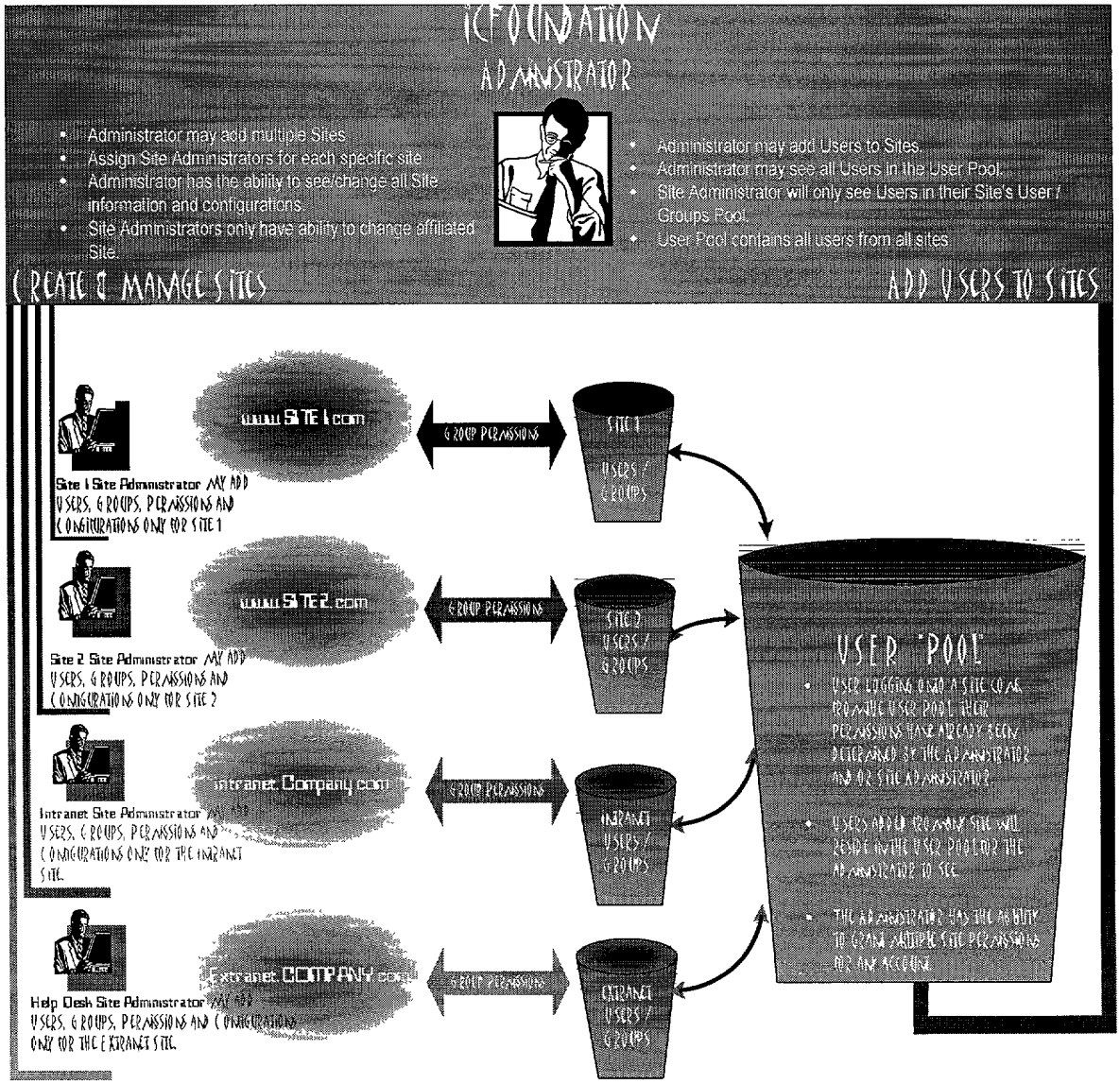
ICFOUNDATION
ADMINISTRATOR
Administrator may add multiple Sites
Assign Site Administrators for each specific site
Administrator has the ability to see/change all Site information and configurations
Site Administrators only have ability to change affiliated Site
Administrator may add Users to Sites
Administrator may see all Users in the User Pool
Site Administrator will only see Users in their Site's User / Groups Pool
User Pool contains all users from all sites
CREATE & MANAGE SITES
ADD USERS TO SITES
www.SITE1.com
GROUP PERMISSIONS
SITE 1 USERS / GROUPS
Site 1 Site Administrator MAY ADD USERS, GROUPS, PERMISSIONS AND CONFIGURATIONS ONLY FOR SITE 1
www.SITE2.com
GROUP PERMISSIONS
SITE 2 USERS / GROUPS
Site 2 Site Administrator MAY ADD USERS, GROUPS, PERMISSIONS AND CONFIGURATIONS ONLY FOR SITE 2
intranet.Company.com
GROUP PERMISSIONS
INTRANET USERS / GROUPS
Intranet Site Administrator MAY ADD USERS, GROUPS, PERMISSIONS AND CONFIGURATIONS ONLY FOR THE INTRANET SITE.
Extranet.COMPANY.com
GROUP PERMISSIONS
EXTRANET USERS / GROUPS
Help Desk Site Administrator MAY ADD USERS, GROUPS, PERMISSIONS AND CONFIGURATIONS ONLY FOR THE EXTRANET SITE.
USER "POOL"
USER LOGGING ONTO A SITE (OR ACCESSIBLE USER POOL THEIR PERMISSIONS HAVE ALREADY BEEN CONFIGURED BY THE AD ADMINISTRATOR AND OR SITE ADMINISTRATOR).
USERS AND GROUPS MAY SEE WILL DEPEND ON THE USER POOL THE ADMINISTRATOR IS SEE.
THE AD ADMINISTRATOR HAS THE ABILITY TO GRANT ANOTHER SITE PERMISSIONS TO ANY ACCOUNT.

Figure 3

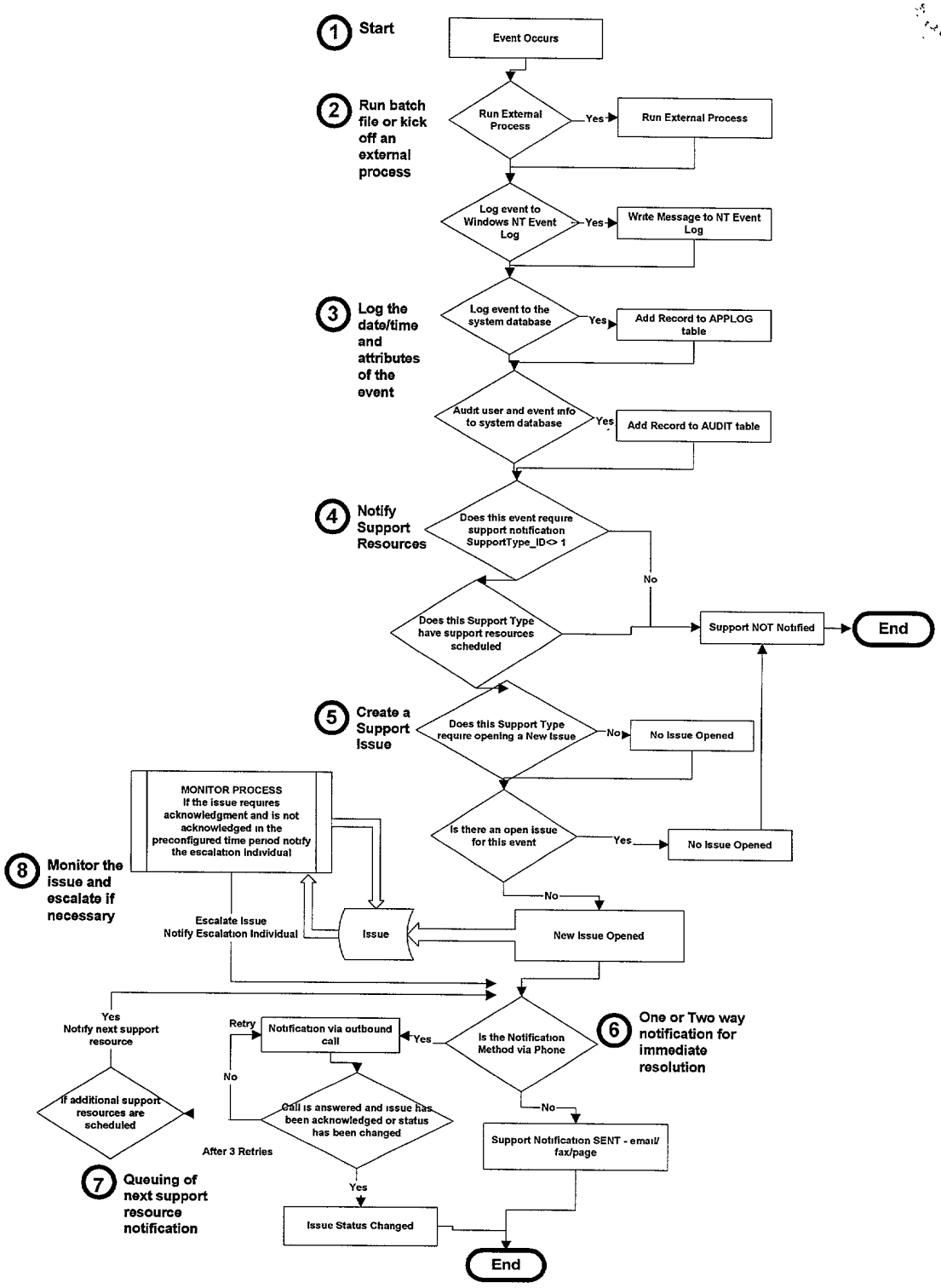
1 Start
Event Occurs
2 Run batch file or kick off an external process
Run External Process
Yes
Run External Process
Log event to Windows NT Event Log
Yes
Write Message to NT Event Log
3 Log the date/time and attributes of the event
Log event to the system database
Yes
Add Record to APPLOG table
Audit user and event info to system database
Yes
Add Record to AUDIT table
4 Notify Support Resources
Does this event require support notification SupportType_ID<> 1
No
Does this Support Type have support resources scheduled
Support NOT Notified
End
5 Create a Support Issue
Does this Support Type require opening a New Issue
No
No Issue Opened
Is there an open issue for this event
Yes
No Issue Opened
No
8 Monitor the issue and escalate if necessary
MONITOR PROCESS
If the issue requires acknowledgment and is not acknowledged in the preconfigured time period notify the escalation individual
Escalate Issue
Notify Escalation Individual
Issue
New Issue Opened
Yes
Notify next support resource
Retry
Notification via outbound call
Yes
Is the Notification Method via Phone
6 One or Two way notification for immediate resolution
No
If additional support resources are scheduled
No
Call is answered and issue has been acknowledged or status has been changed
After 3 Retries
No
Support Notification SENT - email/ fax/page
7 Queuing of next support resource notification
Yes
Issue Status Changed
End

Figure 4

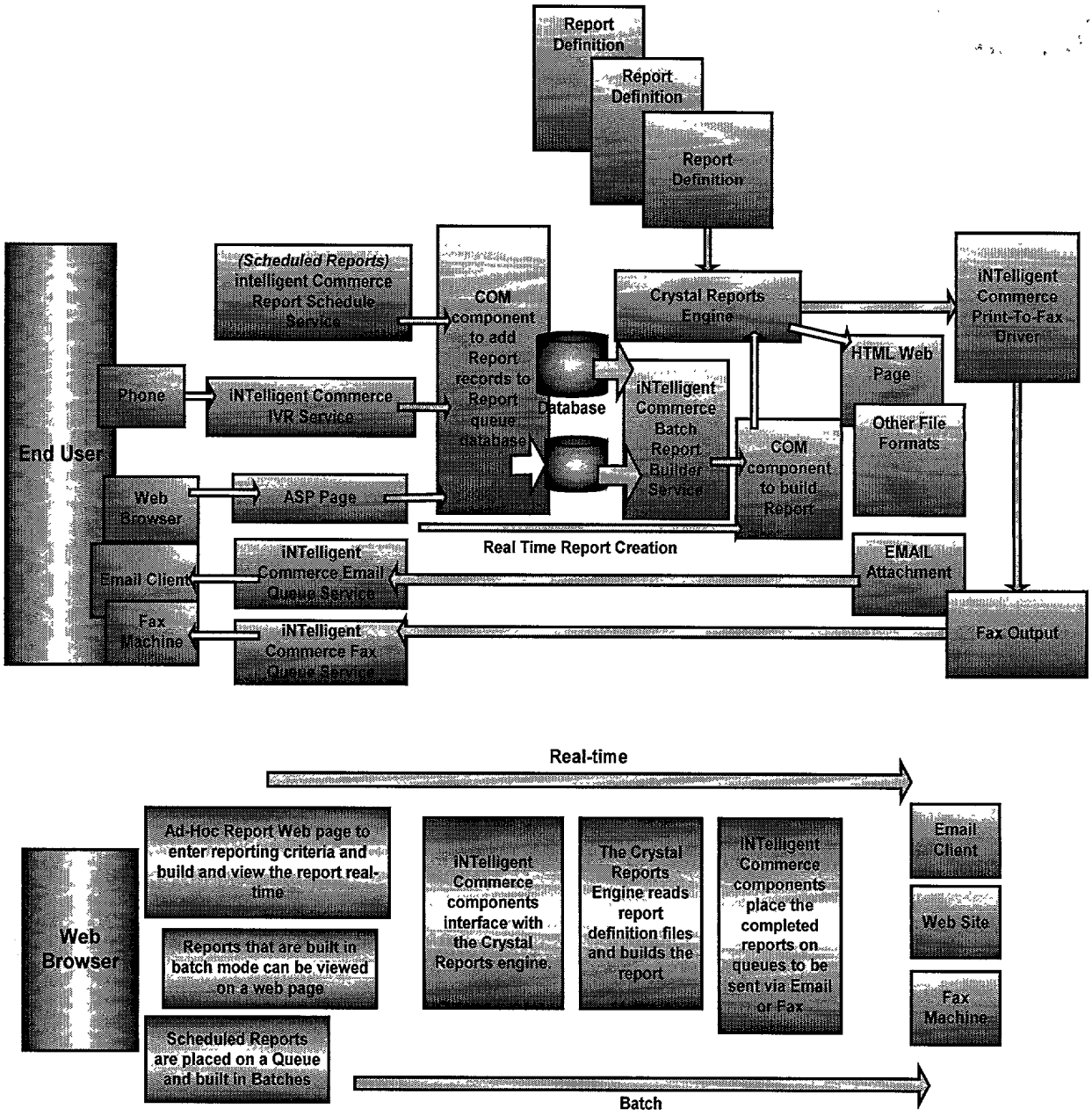
Report Definition
Report Definition
Report Definition
(Scheduled Reports) intelligent Commerce Report Schedule Service
COM component to add Report records to Report queue database
Crystal Reports Engine
iNTelligent Commerce Print-To-Fax Driver
HTML Web Page
Other File Formats
Database
iNTelligent Commerce Batch Report Builder Service
COM component to build Report
Phone
iNTelligent Commerce IVR Service
End User
Web Browser
ASP Page
Real Time Report Creation
EMAIL Attachment
Email Client
iNTelligent Commerce Email Queue Service
Fax Machine
iNTelligent Commerce Fax Queue Service
Fax Output
Real-time
Web Browser
Ad-Hoc Report Web page to enter reporting criteria and build and view the report real-time
Reports that are built in batch mode can be viewed on a web page
Scheduled Reports are placed on a Queue and built in Batches
iNTelligent Commerce components interface with the Crystal Reports engine
The Crystal Reports Engine reads report definition files and builds the report
iNTelligent Commerce components place the completed reports on queues to be sent via Email or Fax
Email Client
Web Site
Fax Machine
Batch

Figure 5

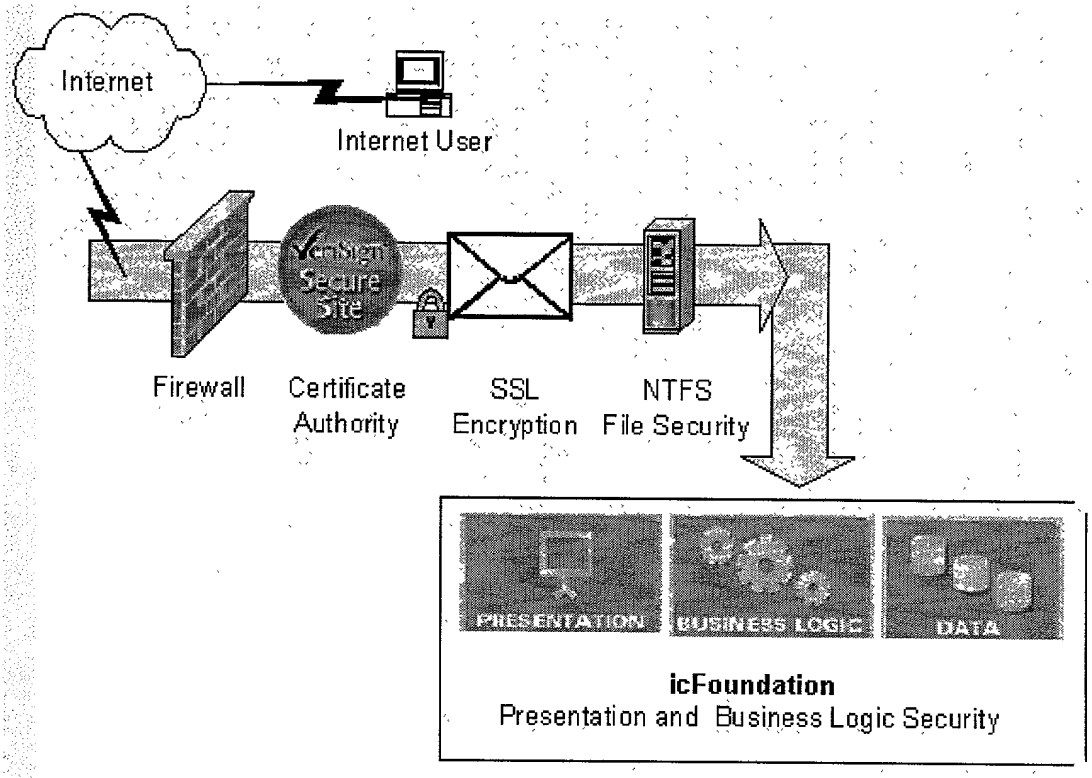
Internet
Internet User
VeriSign Secure Site
Firewall
Certificate Authority
SSL Encryption
NTFS File Security
PRESENTATION
BUSINESS LOGIC
DATA
icFoundation
Presentation and Business Logic Security

Figure 6

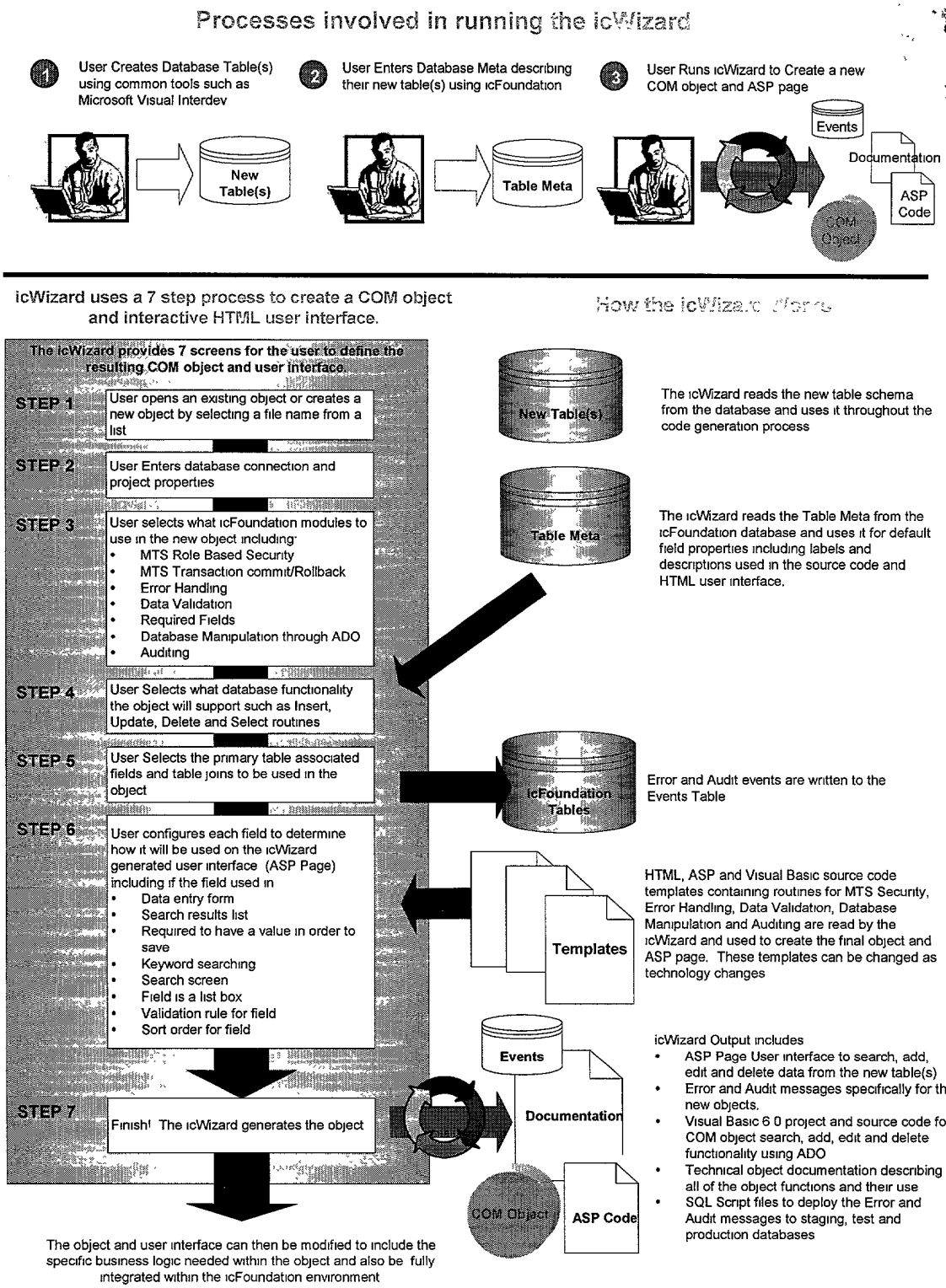
Processes involved in running the icWizard
1 User Creates Database Table(s) using common tools such as Microsoft Visual Interdev
2 User Enters Database Meta describing their new table(s) using icFoundation
3 User Runs icWizard to Create a new COM object and ASP page
New Table(s)
Table Meta
Events
Documentation
ASP Code
COM Object
icWizard uses a 7 step process to create a COM object and interactive HTML user interface.
How the icWizard Works
The icWizard provides 7 screens for the user to define the resulting COM object and user interface.
STEP 1
User opens an existing object or creates a new object by selecting a file name from a list
STEP 2
User Enters database connection and project properties
STEP 3
User selects what icFoundation modules to use in the new object including:
• MTS Role Based Security
• MTS Transaction commit/Rollback
• Error Handling
• Data Validation
• Required Fields
• Database Manipulation through ADO
• Auditing
STEP 4
User Selects what database functionality the object will support such as Insert, Update, Delete and Select routines
STEP 5
User Selects the primary table associated fields and table joins to be used in the object
STEP 6
User configures each field to determine how it will be used on the icWizard generated user interface (ASP Page) including if the field used in
• Data entry form
• Search results list
• Required to have a value in order to save
• Keyword searching
• Search screen
• Field is a list box
• Validation rule for field
• Sort order for field
STEP 7
Finish! The icWizard generates the object
The object and user interface can then be modified to include the specific business logic needed within the object and also be fully integrated within the icFoundation environment
New Table(s)
The icWizard reads the new table schema from the database and uses it throughout the code generation process
Table Meta
The icWizard reads the Table Meta from the icFoundation database and uses it for default field properties including labels and descriptions used in the source code and HTML user interface.
icFoundation Tables
Error and Audit events are written to the Events Table
Templates
HTML, ASP and Visual Basic source code templates containing routines for MTS Security, Error Handling, Data Validation, Database Manipulation and Auditing are read by the icWizard and used to create the final object and ASP page. These templates can be changed as technology changes
Events
Documentation
COM Object
ASP Code
icWizard Output includes
• ASP Page User interface to search, add, edit and delete data from the new table(s)
• Error and Audit messages specifically for th new objects.
• Visual Basic 6 0 project and source code for COM object search, add, edit and delete functionality using ADO
• Technical object documentation describing all of the object functions and their use
• SQL Script files to deploy the Error and Audit messages to staging, test and production databases

Figure 7

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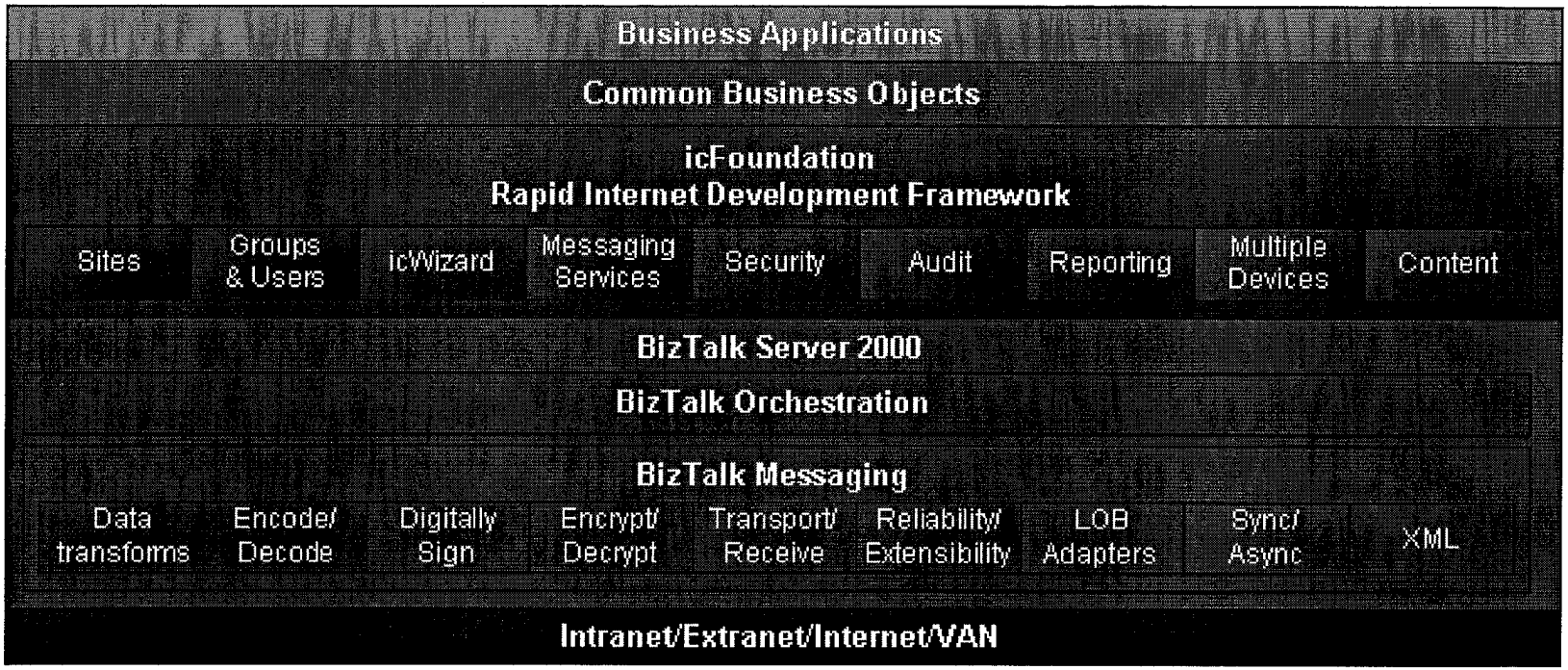


Figure 8

T08T60"h892h860

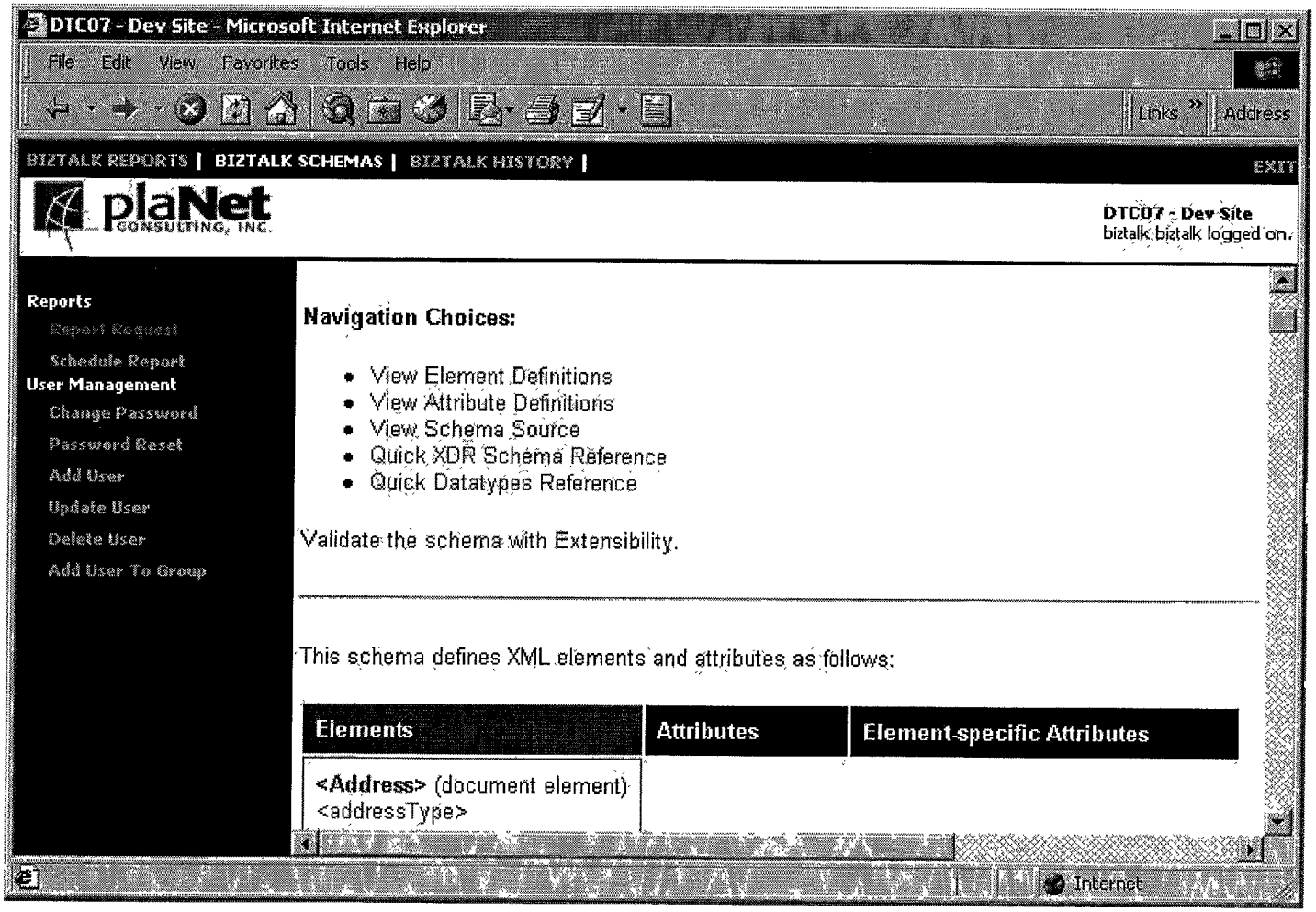


Figure 9

T08T60"4892h860

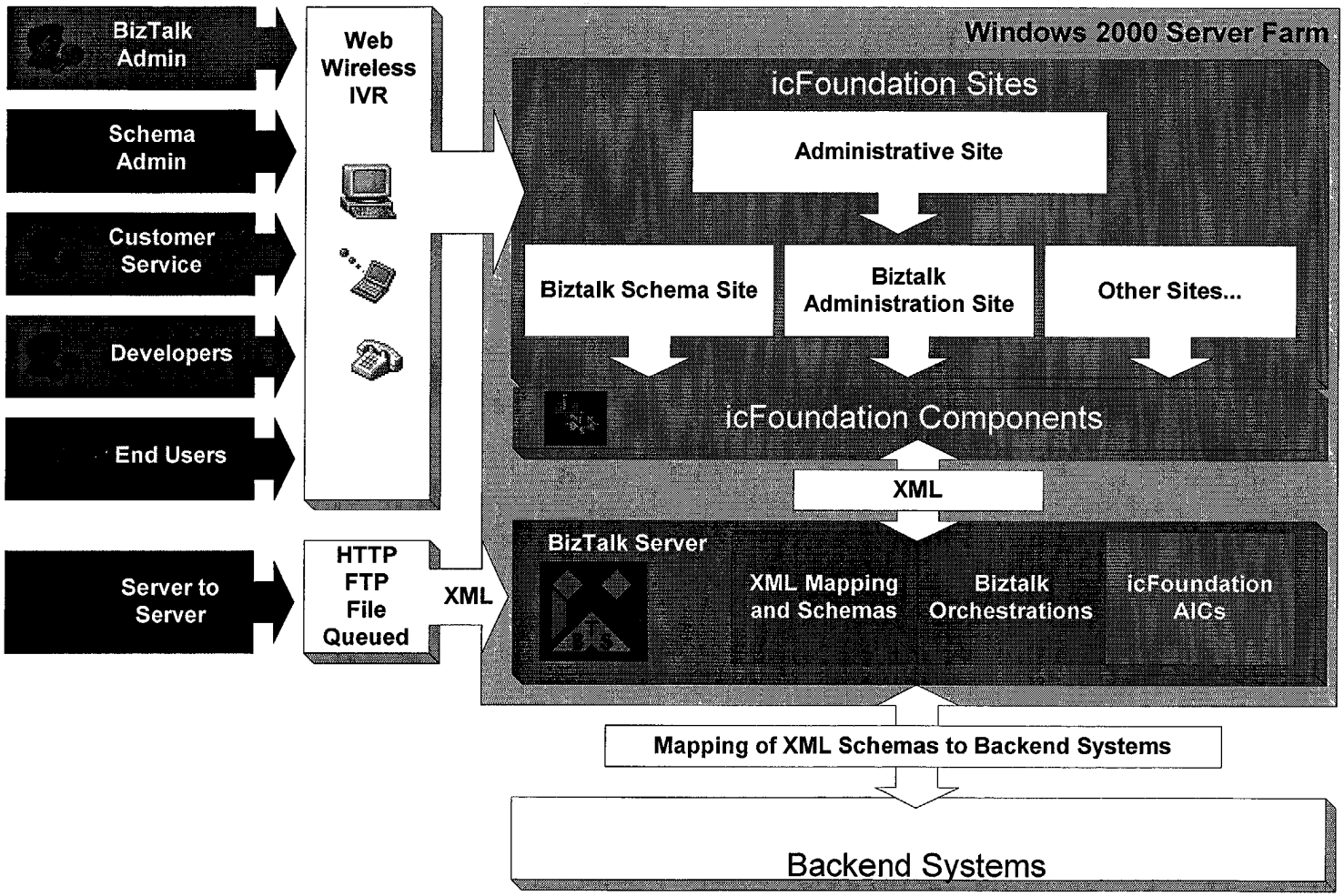


Figure 10

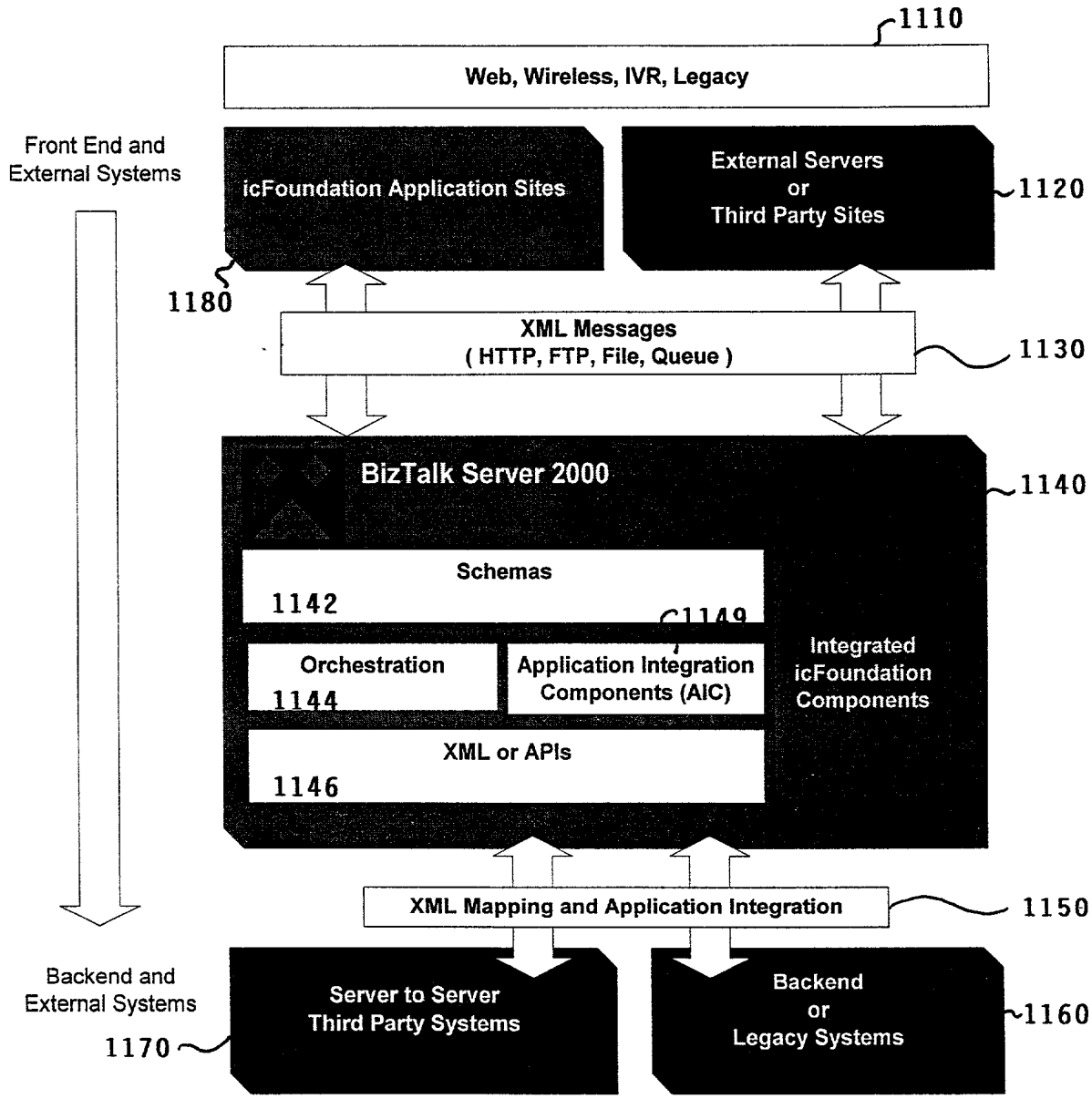

1110
Web, Wireless, IVR, Legacy
Front End and External Systems
icFoundation Application Sites
External Servers or Third Party Sites
1120
1180
XML Messages (HTTP, FTP, File, Queue)
1130
BizTalk Server 2000
1140
Schemas
1142
1149
Orchestration
1144
Application Integration Components (AIC)
Integrated icFoundation Components
XML or APIs
1146
XML Mapping and Application Integration
1150
Backend and External Systems
1170
Server to Server Third Party Systems
Backend or Legacy Systems
1160

Figure 11

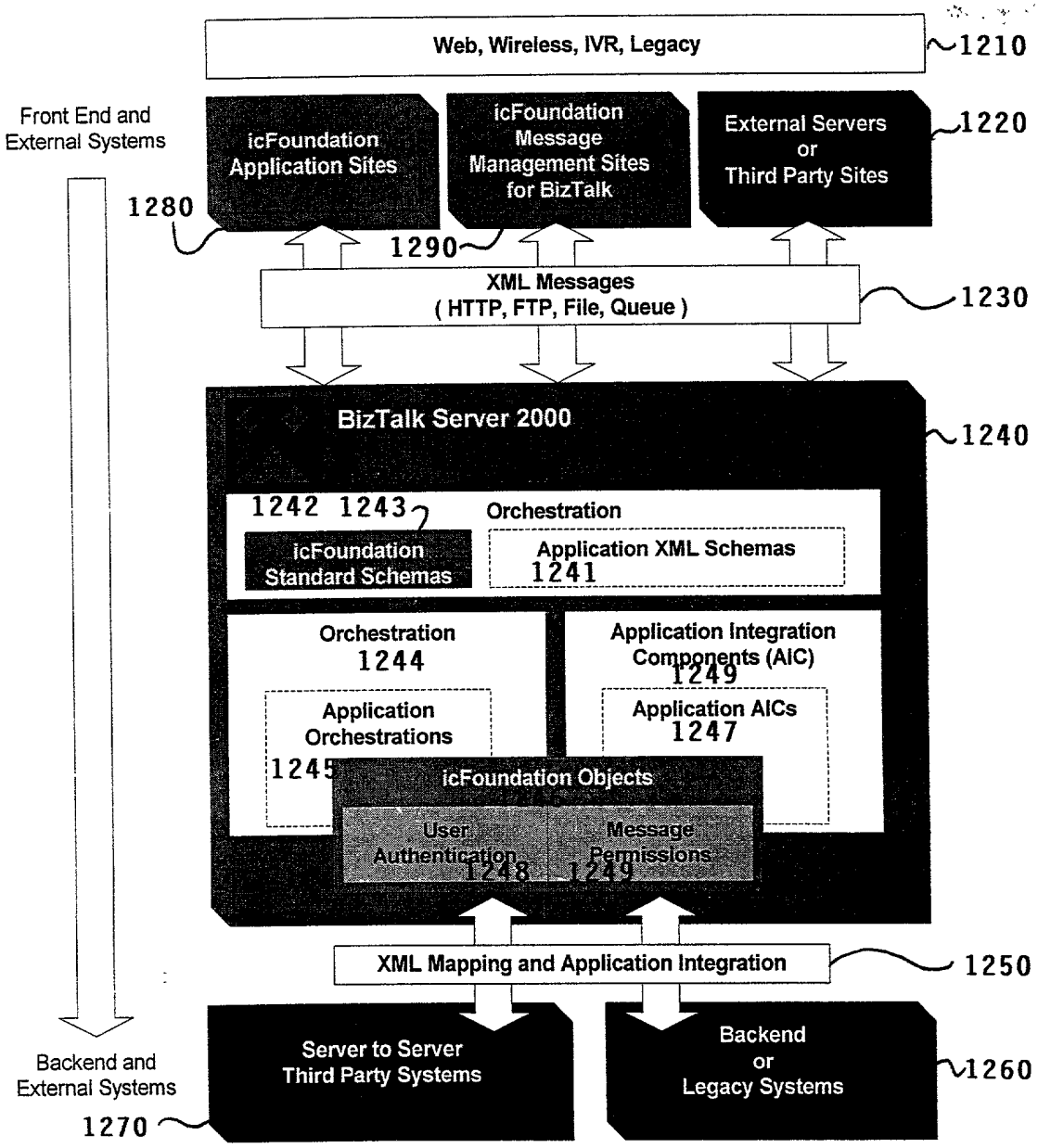

Web, Wireless, IVR, Legacy
1210
Front End and External Systems
icFoundation Application Sites
icFoundation Message Management Sites for BizTalk
External Servers or Third Party Sites
1220
1280
1290
XML Messages (HTTP, FTP, File, Queue)
1230
BizTalk Server 2000
1240
1242 1243
Orchestration
icFoundation Standard Schemas
Application XML Schemas
1241
Orchestration
1244
Application Integration Components (AIC)
1249
Application Orchestrations
1245
Application AICs
1247
icFoundation Objects
User Authentication
1248
Message Permissions
1249
XML Mapping and Application Integration
1250
Backend and External Systems
1270
Server to Server Third Party Systems
Backend or Legacy Systems
1260

Figure 12

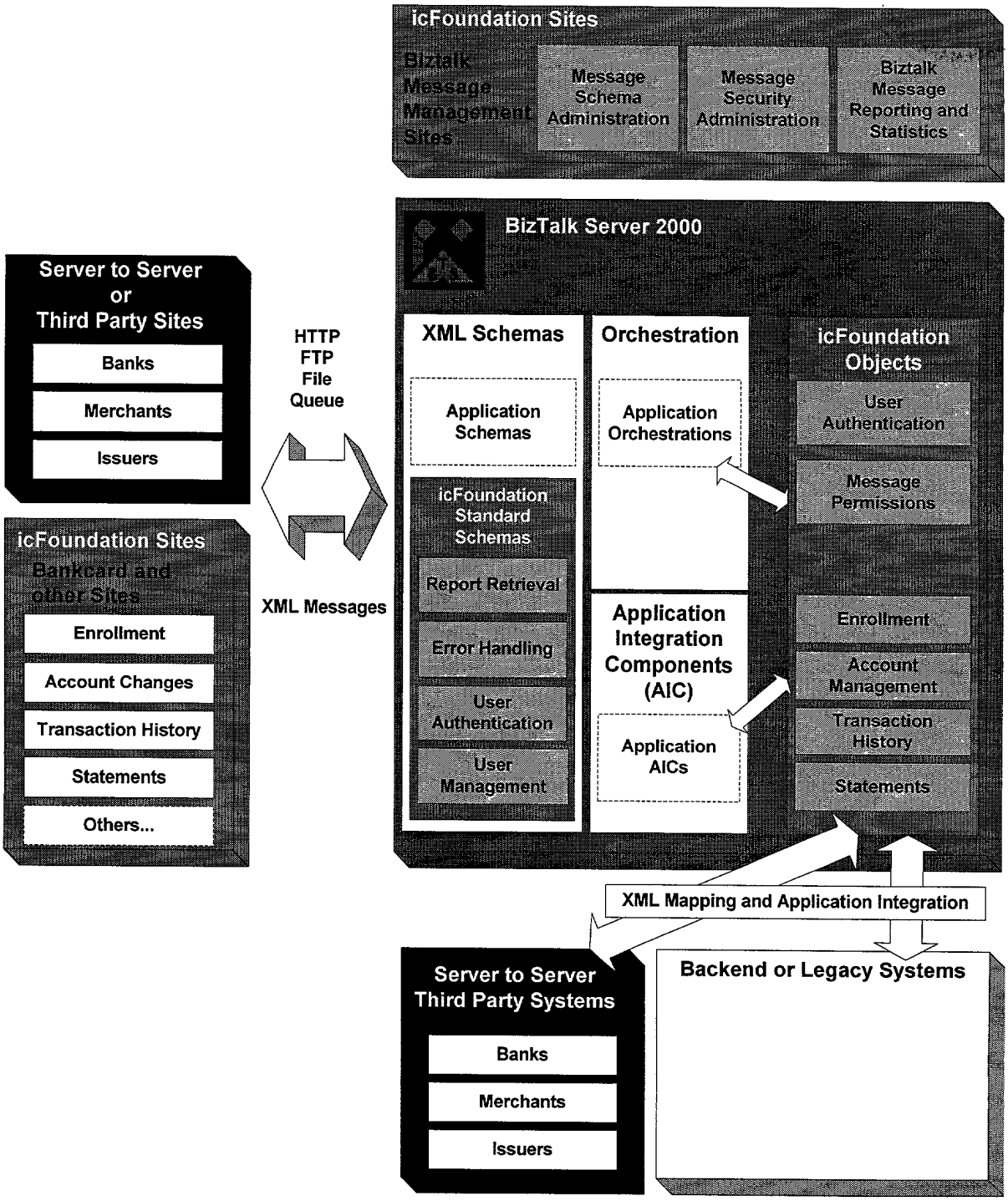
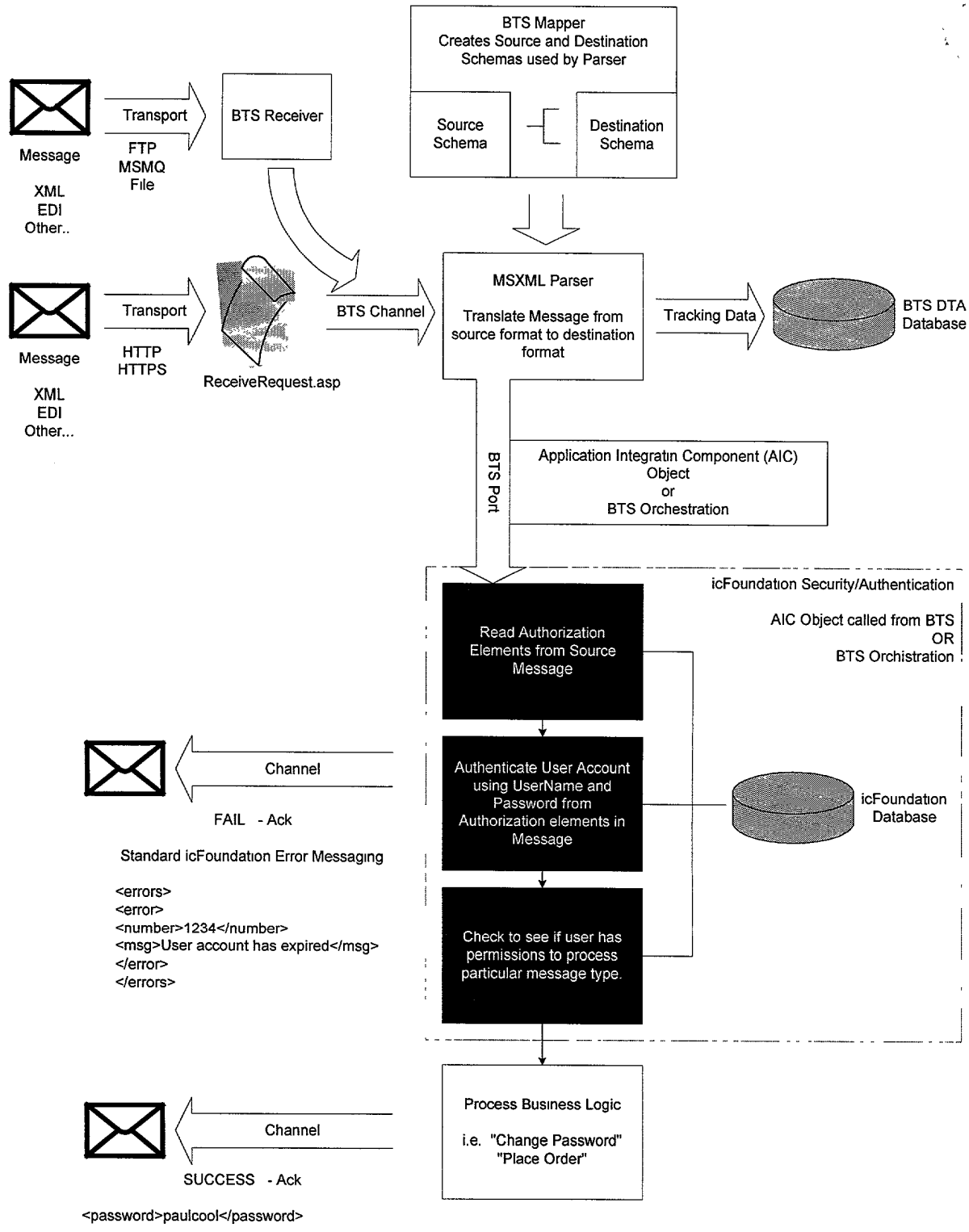

icFoundation Sites
Biztalk Message Management Sites
Message Schema Administration
Message Security Administration
Biztalk Message Reporting and Statistics
BizTalk Server 2000
Server to Server or Third Party Sites
Banks
Merchants
Issuers
HTTP
FTP
File
Queue
XML Messages
icFoundation Sites
Bankcard and other Sites
Enrollment
Account Changes
Transaction History
Statements
Others...
XML Schemas
Application Schemas
icFoundation Standard Schemas
Report Retrieval
Error Handling
User Authentication
User Management
Orchestration
Application Orchestrations
Application Integration Components (AIC)
Application AICs
icFoundation Objects
User Authentication
Message Permissions
Enrollment
Account Management
Transaction History
Statements
XML Mapping and Application Integration
Server to Server Third Party Systems
Banks
Merchants
Issuers
Backend or Legacy Systems

Figure 13

T08T60" h892h860

Figure 14

BizTalkSchema_ID	Int (Primary Key)	Auto-generated key field
SchemaName	Varchar(30)	User-friendly name for the message
ReqRootTag	Varchar(30)	Root XML Tag name
AckRootTag	Varchar(30)	Root tag for the Ack message
SubMenu_ID	Int	Key of the Sub Menu Item used to secure this request.
DescriptionFile	Varchar(255)	Name of an HTML file describing the message exchange.



You might want to change the <password>paulcool</password>

Figure 15

T08T60"+892h860

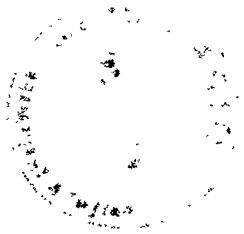
Argument	Type	In/Out	Description
strXML	String	In	XML containing authentication elements.
StrLanguage	String	Out	Name of Language to return messages in (i.e. English). If blank then English is assumed.
StrSiteUrl	String	Out	URL of the site this user is trying to logon to (i.e. intranet.planetci.com).
strUserName	String	Out	User Name of the logon. Must match Login.UserName field in the database to authenticate.
StrPassword	String	Out	Password of the logon in clear text. The AuthenticateLogin object will create an SHA-1 hash of this text and compare it to the Login.Password field in the database to authenticate.
StrResult	String	Out	If failure or error, this will contain the user-friendly text to display to the end user with the failure or error description.
StrErrorMsg	String	Out	If failure or error, this will contain additional error information. If the strOptions /EEXML or /ERXML flags are on, this will be in XML.
StrRootTag	String	Out	Root XML Tag extracted from the document.

Figure 16

T08T60*h892h860

Argument	Type	In/Out	Description
strLanguage	String	In	Name of Language to return messages in (i.e. English). If blank then English is assumed.
strSiteUrl	String	In	ULR of the site this user is trying to logon to (i.e. intranet.planetci.com).
strUserName	String	In	User Name of the logon. Must match Login.UserName field in the database to authenticate.
strPassword	String	In	Password of the logon in clear text. The AuthenticateLogin object will create an SHA-1 hash of this text and compare it to the Login.Password field in the database to authenticate.
lngLogin_ID	Int	Out	If the authentication is successful, this will contain the Primary key to the login table for the user.
lngProject_ID	Int	Out	If the authentication is successful, this will contain the Primary key to the project table for the strSiteUrl.
LngLanguage_ID	Int	Out	If the authentication is successful, this will contain the Primary key to the Language table for the strLanguage.
strFullName	String	Out	First and Last name of the user.
strEmail	String	Out	Email address of the user.
strResult	String	Out	If failure or error, this will contain the user-friendly text to display to the end user with the failure or error description.
strErrorMsg	String	Out	If failure or error, this will contain additional error information. If the strOptions /EEXML or /ERXML flags are on, this will be in XML.

Figure 17



F08760 "h892h860

Argument	Type	In/Out	Description
lngLanguage_ID	Int	In	Name of Language to return messages in (i.e. English). If blank then English is assumed.
lngProject_ID	Int	In	Foreign key for the URL of the site this user is trying to logon to (i.e. intranet.planetci.com).
lngLogin_ID	Int	In	If the authentication is successful, this will contain the Primary key to the login table for the user.
strRootTag	String	In	Root tag that must match FNBizTalkSchema.RootTag field.
strResult	String	Out	If failure or error, this will contain the user-friendly text to display to the end user with the failure or error description.
strErrorMsg	String	Out	If failure or error, this will contain additional error information. If the strOptions /EEXML or /ERXML flags are on, this will be in XML.

Figure 18

T08T60" th892th860

Argument	Type	In/Out	Description
lngLanguage_ID	Int	In	Name of Language to return messages in (i.e. English). If blank then English is assumed.
lngProject_ID	Int	In	Foreign key for the URL of the site this user is trying to logon to (i.e. intranet.planetci.com).
lngLogin_ID	Int	In	If the authentication is successful, this will contain the Primary key to the login table for the user.
NdReport	XML DOM	In	XML DOM Object containing the report request.
strResult	String	Out	If failure or error, this will contain the user-friendly text to display to the end user with the failure or error description.
strErrorMsg	String	Out	If failure or error, this will contain additional error information. If the strOptions /EEXML or /ERXML flags are on, this will be in XML.

Figure 19